

# Matlab Lesson #2

1. Please review all commands in Matlab Lesson #1.
2. Matlab can be used to find the sum of a series by computing the sum of enough terms. Here is the code

```
s = 0; for n=1:100; s = s + 1/n^2; end; s
```

The above code computes  $\sum_{n=1}^{100} \frac{1}{n^2}$ . The variable  $s$  was first set to 0. The `for` loop starts with `n=1` and ends at `n=100` (all members in the vector `1:100` will be hit once in the loop). All commands between `for` and `end` are executed repeatedly starting `n=1` and until `n=100`. For each `n` the term  $\frac{1}{n^2}$  is added to the the variable `s`, until the loop stops when `n` hits 100.

The semicolons were used to suppress all intermediate output that we are not interested in. Replacing the semicolon just before `end` by a comma would force intermediate results displayed 100 times.